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UNIVERSITY OF CALIFORNIA
MEDICAL SCHOOL

CALIFORNIA STATE BOARD OF HEALTH MONTHLY BULLETIN



Steamer "Alameda," one of the cleanest ferry boats in the world.

**WORLD'S CLEANEST FERRY BOATS
VITALITY OF RACE STOCKS**

AUGUST, 1921.

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CALIFORNIA STATE BOARD OF HEALTH

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MONTHLY BULLETIN

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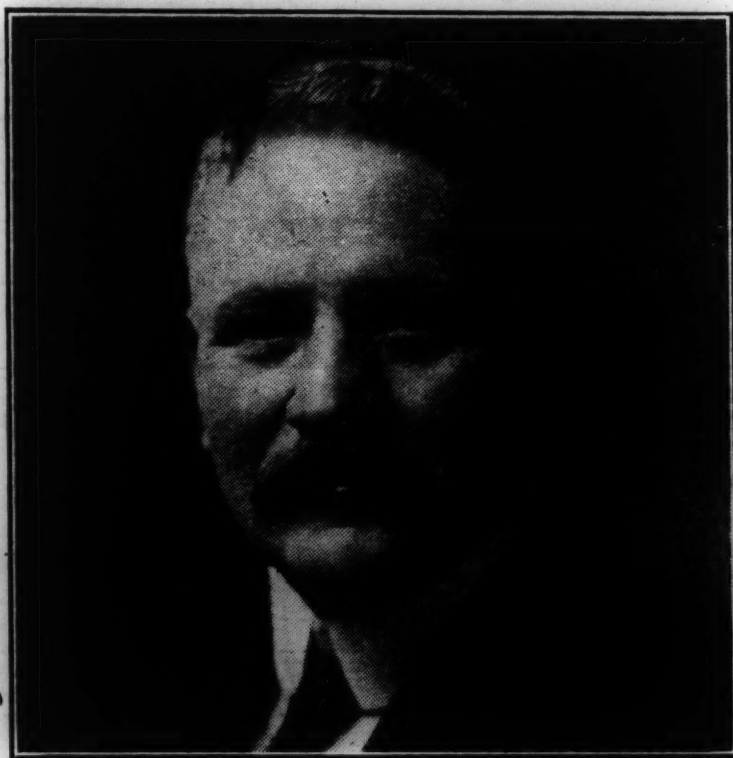
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WALTER M. DICKIE, M. D., Secretary . . . Executive Officer
GUY P. JONES Editor

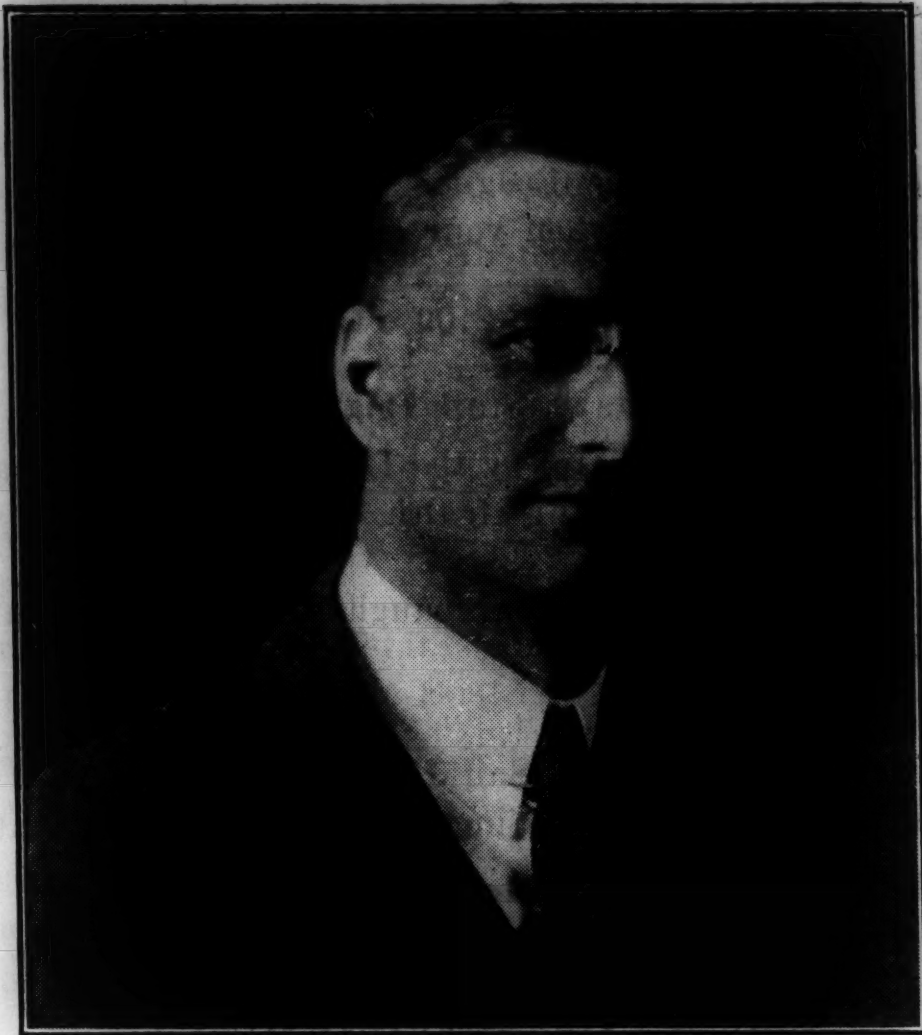
Health Officers to Meet in Santa Monica.

The annual conference of state, county and municipal health officials, which will be held in Santa Monica September 27 to 30, in conjunction with the annual convention of the League of California Municipalities, promises to be one of the most important and interesting health conferences ever held in California. Dr. F. W. Browning, Hayward, secretary of the health officers' organization, together with Dr. L. M. Powers of Los Angeles, vice president, and Dr. Walter M. Dickie, president, have labored earnestly in preparing the program which is printed here.

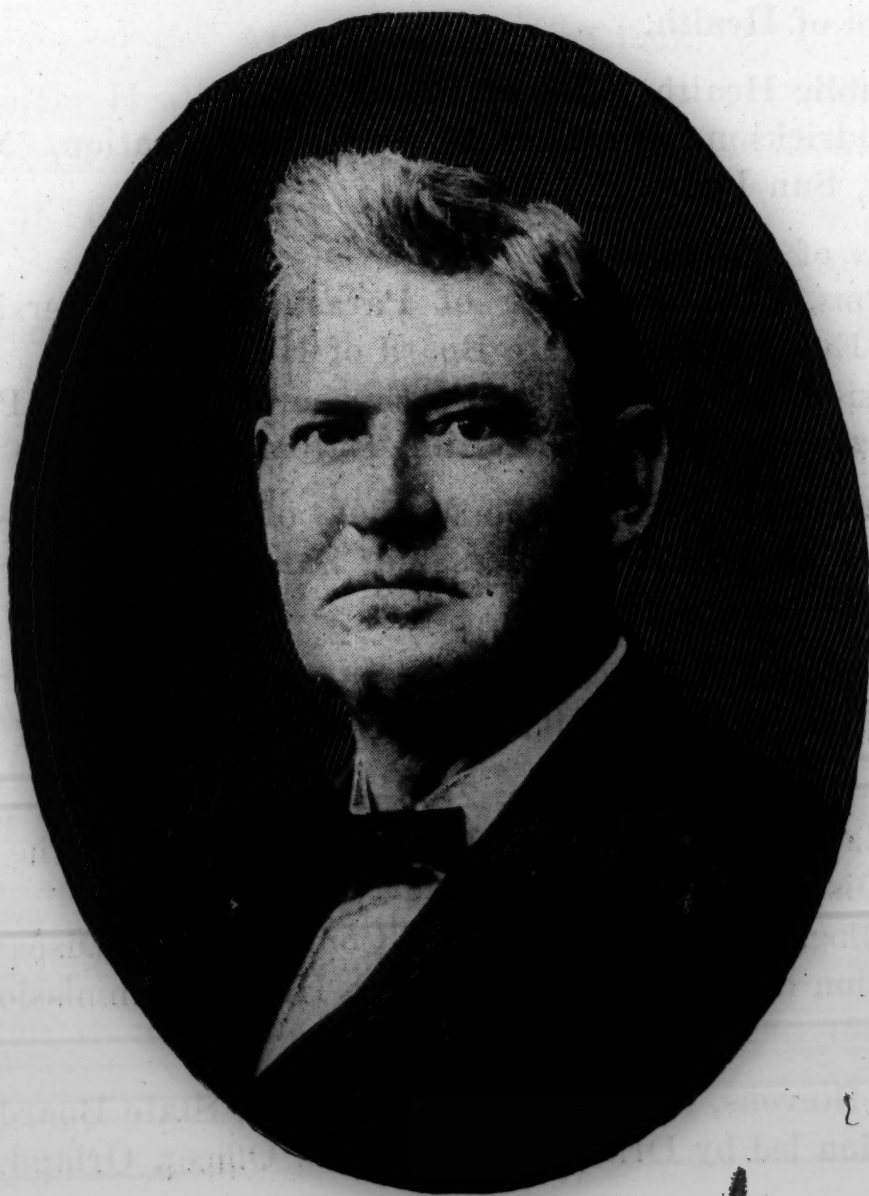


Dr. F. W. BROWNING, Hayward, Secretary Health Officers' Section, League of California Municipalities.

Public health nurses are expected to attend the conference in large numbers and many of the papers to be presented will be of particular interest to nurses who are engaged in public health. A large attendance is expected and every health officer in the state should take advantage of this opportunity for conferring with other person who are engaged in public health work in the various communities throughout California.



Dr. WALTER M. DICKIE, Sacramento, President Health Officers' Section, League of California Municipalities.



Dr. L. M. POWERS, Los Angeles, Vice President Health Officers' Section, League of California Municipalities.

**Program, Health Officers Section, League of California Municipalities,
Santa Monica, September 27-30, 1921.**

FIRST DAY—TUESDAY, SEPTEMBER 27.

Morning.

Meet in general session with the League. (All health officers are requested to answer the roll call of the League when your city is called.)

Afternoon, 2:00 o'Clock.

1. Address.
Dr. Walter M. Dickie, Secretary, State Board of Health.
2. Method of Venereal Disease Control by the Los Angeles City Health Department.
Dr. Arthur M. Rogers, Assistant Health Commissioner, Division of Venereal Control, Los Angeles.
Discussion led by R. I. Longebaugh, U. S. N., in charge Naval Base, San Pedro.
3. The Control of Diphtheria.
Dr. H. C. Brown, Health Officer, San Jose.
Discussion led by Dr. Wm. Simpson, Health Officer, Santa Clara County.
4. The Duties and Requirements of a Health Officer.
S. F. Butler, Health Officer, Salinas.

SECOND DAY—WEDNESDAY.

Morning, 9:00 o'Clock.

5. Food Infections and Food Poisoning.
Dr. Karl F. Meyer, Professor of Research Medicine, Hooper Foundation for Medical Research, University of California; Consultant in Bacteriology, State Board of Health.
6. Fish From a Public Health Point of View.
Norman Hendrickson, Director of Fish Investigation, National Cannery Association, San Pedro.
7. Sanitary Aspects of Fly Control.
Wm. B. Herms, B.S., Professor of Parasitology, University of California; Consulting Entomologist, State Board of Health.
Discussion led by Stanley B. Freeborn, Assistant Professor of Entomology; Assistant Consulting Entomologist, State Board of Health.
8. Some Current Problems and Available Methods of Municipal Refuse Disposal.
Charles Gilman Hyde, C.E., Professor of Sanitary Engineering, University of California.
9. The Health Officer and the Needy Child.
Miss Amy Steinhart, Chief Children's Agent, State Board of Control.

Afternoon, 2:00 o'Clock.

10. Rules and Regulations of the State Board of Health for the Control of Communicable Diseases.
Dr. W. H. Kellogg, Director, Bureau of Communicable Diseases.
Discussion led by Dr. L. M. Powers, Health Commissioner, Los Angeles.
11. Morbidity.
Miss Ida May Stevens, Assistant Epidemiologist, State Board of Health.
Discussion led by Dr. S. Iglick, Health Officer, Orland.
12. Uncommon Forms of Communicable Diseases in California—Leprosy, Beri-beri, Lethargic Encephalitis, Pellagra, Plague, Poliomyelitis.
Dr. Frank L. Kelly, Epidemiologist, State Board of Health.

THIRD DAY—THURSDAY.**Morning, 9:00 o'Clock.**

13. Municipal Auto Camps and Roadside Camps.
E. T. Ross, Chief Sanitary Inspector, State Board of Health.
14. Sanitation of Beach Resorts.
Dr. Irvin L. Magee, Health Officer, Venice.
15. Authority of Health Officers in the Abatement of Nuisances.
John C. MacFarland, Attorney, State Board of Health.

Afternoon, 2:00 o'Clock.

16. Relation of Health Officer to Child Hygiene.
Dr. Adelaide Brown, Member, State Board of Health.
17. Clinical Differentiation Between Encephalitis, Poliomyelitis and Certain Forms of Food Poisoning.
Dr. George E. Ebright, Assistant Clinical Professor of Medicine, University of California; President, State Board of Health.
18. The Treatment of Pulmonary Tuberculosis.
Dr. Robert A. Peers, Member, State Board of Health.
19. Dental Hygiene in Public Health.
Miss Charlotte Greenhood, Supervisor, Division of Dental Hygiene, State Board of Health.

FOURTH DAY—FRIDAY.**Morning, 9:00 o'Clock.**

20. Joint Session with the Milk Inspectors' Session of the League of California Municipalities.

Afternoon, 2:00 o'Clock.

21. Some Reasons for Health Centers.
Dr. F. E. Corey, Alhambra.
22. Organization of Health Center in Rural Districts.
Miss O. C. Schafer, R.N., Executive Officer, Health Center, Hayward.
23. The Health Center.
Dr. F. W. Browning, Health Officer, Hayward.
24. Relation of Public Health Nursing to County Health Officer.
Miss Agnes Talcott, Chief Nurse, Los Angeles City Health Department.

An evening will be devoted to the showing of public health moving picture films, which will be open to the general public.

Dr. Frank L. Kelly, Epidemiologist of the State Board of Health, will give demonstrations of the "Schick Test and Active Immunization."

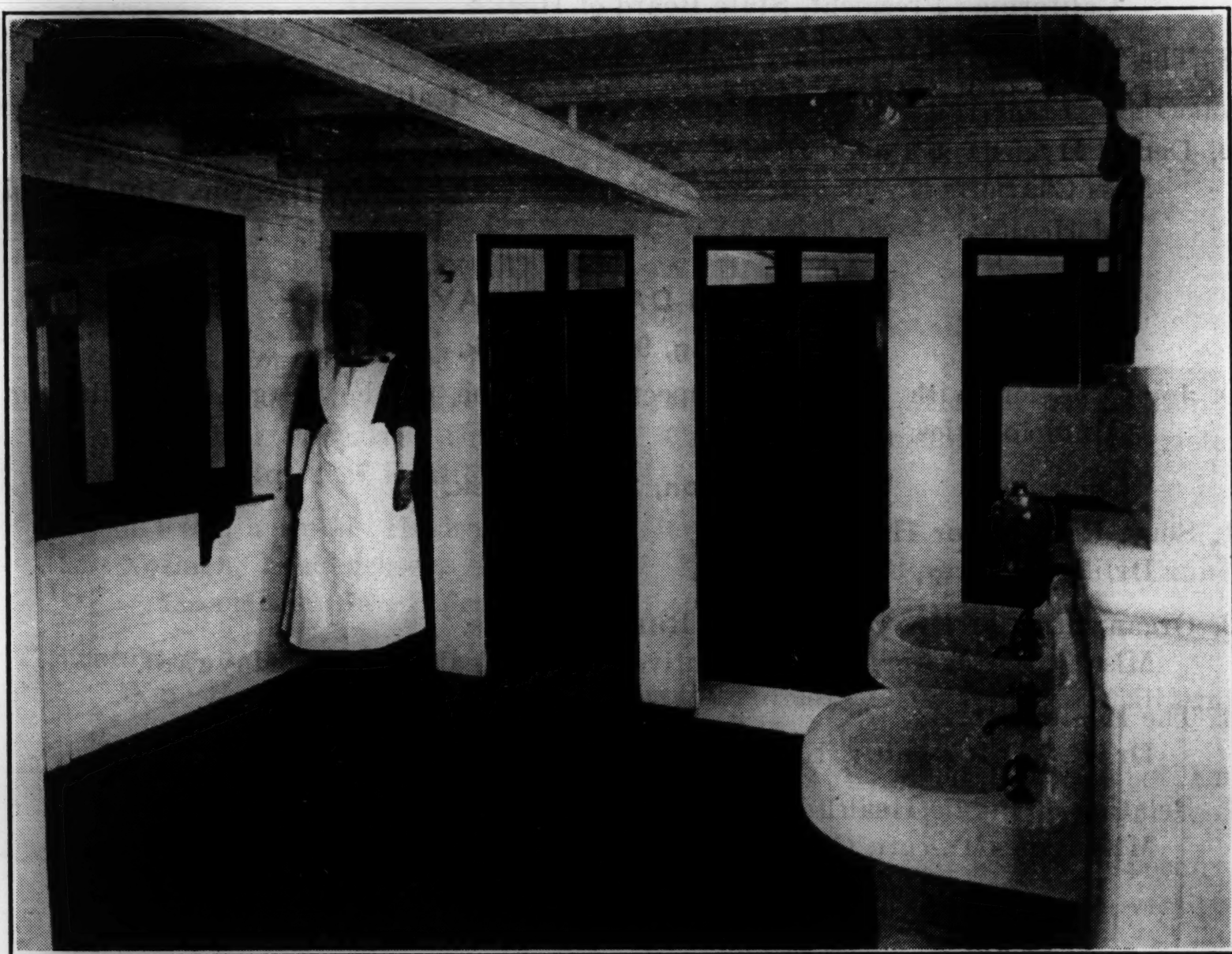
There will be an instructive demonstration by Dr. Allen F. Gillihan, District Health Officer, State Board of Health, of the technique of vaccination with clinical cases showing the reaction of immunity against smallpox.

Every physician should make a special point to attend these important demonstrations.

KEEPING THE FERRY BOATS CLEAN; HOW THE SOUTHERN PACIFIC MAINTAINS THE WORLD'S CLEANEST FERRY BOATS.

In handling its ferry service on San Francisco Bay, the Southern Pacific Company gives more attention to the cleaning of the vessels, their proper sanitation and ventilation, than to any other problems except those directly involved in navigating the steamers.

The magnitude of the task may be appreciated when attention is called to the fact that in 1920 there were 26,946,439 persons carried by three Southern Pacific ferry routes, Oakland Pier, Alameda Pier and Oakland Harbor. This is an average of 2,235,536 a month, or 73,825 a day.



Steamer "Alameda."

The sanitation of the kitchens and dining rooms on the Southern Pacific ferry boats receives the utmost attention. A staff of cleaners is constantly employed. The ice boxes are kept absolutely clean, all utensils washed and sterilized. There is a storeroom maintained on the wharf with large ice boxes, where supplies are received, kept and issued, so that only the immediate demands are stored in the constricted space in the kitchens. There is also a kitchen at the commissary where the food is prepared—vegetables carefully cleaned, meats cut, soup stocks prepared—and delivered to the boats ready for the cooks. There is also a bakeshop for the baking of rolls, pies, etc.

Crew Responsible for Cleaning.

On every steamer the work of cleaning is assigned to the individual members of the crew. For example, the lower or main deck, as it is sometimes referred to, where the largest part of the crew is employed and which requires the most attention, is in charge of the second officer, who is responsible to the captain for the cleanliness of this part of the steamer. The second officer is the supervisory officer of the lower deck. He assigns certain portions of the steamer to individual members of the crew to clean and keep in an orderly condition. One deckhand may have assigned to him the port side amidships aft, another the starboard side amidships forward and another the toilets, and so on. In this manner it not only divides the work and makes each deckhand responsible for his particular portion, but stimulates a certain amount of friendly competition among the men.

On the saloon deck, or upper deck, as it is sometimes called, and in the main cabin the cleaning is done by two cabin men, the ladies' retiring rooms being in charge of a matron. These employees, being under the supervision of the first officer, as on the lower deck, the work is divided between the two men.

Frequent daily inspections are made by the captain to see that the steamer is being properly cared for.

System Is Necessary.

Considering the large volume of passenger traffic between the hours of 6 a.m. and 8 p.m. between Oakland, Alameda and San Francisco, it is indeed a task to keep the boats in first-class condition as to cleanliness, and were it not for the systematic manner in which the work is handled, it would be impossible.

It can readily be seen that during the day only the light cleaning can be done, on account of the short time at terminals and the passengers being aboard, so all heavy cleaning is done during the night, after the boats are through running.

The light cleaning during the running time consists of sweeping the decks at a time that it will not inconvenience the passengers, polishing brass, cleaning cuspidors, cleaning windows inside, washing paint work inside. The man assigned to men's toilets after each heavy trip cleans the toilet, scrubs the paint work, washes the bowls and urinals. In the cabin the floors are swept, seats are dusted, spots removed from paint work, the ladies' retiring rooms are looked after and put in shape after each trip by the matron.

The heavy cleaning after the boats complete the day's work consists of washing down the main deck, using a large hose, lye and sand. Also the outside of boat is washed down, all windows cleaned on the outside, toilets scrubbed out with lye and water with disinfectant added to the water, cuspidors given a thorough cleaning and sufficient disinfectant put in each cuspidor. It might also be added that during the day trips, when the main deck is sprinkled, a sufficient amount of disinfecting solution is added to the water.

The crew's quarters receive the same attention as other parts of the steamer. In the cabin the linoleum floor covering is scrubbed thoroughly

and cuspidors disinfected. The floor in the ladies' room also is scrubbed and toilets disinfected.

Fumigation to Kill Rodents.

When time permits and conditions warrant, the steamers are fumigated. This is done by the means of burning sulphur. Every room is closed and a burner put in each room. A number of burners are placed in the cabin, the same below the main deck and in the crew's quarters. Experience has shown that this is the most practical manner to rid the steamers of rodents, but in addition rat poison and traps are used. This fumigating can only be done when boats are off the run at the shipyard.

In connection with proper sanitation of the ferry steamers, the Southern Pacific Company maintains at the San Francisco ferry station a plumbing shop, whose employees are constantly supervising and maintaining the plumbing on the steamers.

The bilges on all steamers are thoroughly cleaned every week, bilges being pumped dry every day, so that no stagnant water may accumulate.

The grill rooms and kitchens of the ferry boats receive the constant inspection, not only of the employees of the steamer department, but the inspection of all branches of service under the jurisdiction of the dining car department.

To maintain sanitary conditions, as well as the service, the crews are divided into three or two watches, according to the run. During the morning and evening trips, the service is heaviest. Between these periods the crews are constantly cleaning and sterilizing equipment under the supervision of the steward in charge.

Supplies Are Kept Fresh.

In addition to this, the management of the dining car department has created a number of new features in the preparation of meal supplies to insure perfect cleanliness. The boats are furnished enough perishable supplies to last a round-trip. On one of the piers a commissary is established, which is operated day and night to insure fresh supplies. One of the most desirable features is the butcher shop, where the meats are cut according to the particular needs of the trip, as, during regular meal service, the patrons usually order the prepared entrees, whereas, between meal periods, short orders are usually called for. This shop also prepares special articles, such as sausage, head cheese and corned meats, which insures their absolute quality, as only the highest class of supplies are purchased by the department, and inspected before being received.

A kitchen is maintained to prepare soups, entrees, sauces and desserts, giving a uniform and high standard of cooking, also serving as a means of instruction to cooks to be advanced. These articles are delivered to the boats in covered containers, specially constructed, allowing a fresh supply at intervals; also, a bakery is maintained, which supplies have specially constructed containers for handling.

In addition, when possible, canned goods, jams, jellies, marmalades, etc., are purchased in individual containers. Butter is specially packed for this service and cream is purchased in sealed cans.

THE SCHOOL OF NURSING IN ITS RELATION TO THE HOSPITAL.*

ANNA C. JAMME, Director, Bureau of Registration of Nurses, California State Board of Health.

Doubtless one of the most interesting phases connected with the development of hospital work in the past sixty years has been the rise and progress of schools of nursing. Beginning out of the necessity for a system which would work to obtain better care of the sick in hospitals and for the training of women in the care of the sick outside of hospitals, this has developed to the point where we now have sixteen hundred schools of nursing in the United States. The relationship of these schools to the hospitals, with which they are connected, offers a most interesting field of study, and one which is now occupying the attention of several groups concerned in the functions of both hospital and school.

In the first conception of a systematic training for nursing the idea was that the school should not be a part of the hospital administration, but should have its separate entity, its own administration and faculty, be endowed, and the students would receive their professional training in the wards of the hospital. Such was Miss Nightingale's idea, which she carried out in her school in London.

School Part of Hospital in America.

In this country there was no such beginning. From the first, the school was a part of the hospital administration and, in the course of time, was looked upon as necessary in order to carry on the nursing, as well as much of the domestic work, of the hospital. The hospital became dependent upon the school for the services of the students. The school, in its turn, has been dependent upon the hospital, and this economic relationship has continued throughout the years.

In this economic relationship, the hospital has had to provide means for the maintenance, education and training of its students and for the administration of the school. This administrative staff must consist of a superintendent of nurses and her assistants, supervising nurses, head nurses, nurse instructor and her assistants, all of which are salaried and receive maintenance from the hospital. There must be teaching facilities, such as classroom, laboratories, with their equipment and libraries, all of which are supplied from hospital funds. Students must be maintained and housed. This is now, as a rule, in separate residences, often built at considerable expense, well furnished and homelike. In the later years, considerable attention has been given to the social surroundings of the students and it is not unusual to find either a tennis or basketball court, gymnasium, swimming pools, or other means for recreation. The student entering a school of nursing today becomes, as it were, the ward of the hospital. She looks to the hospital for her education, her housing, her maintenance, and her social entertainment; she is given a certain amount in money to furnish her with uniforms, textbooks and her other necessities. She is cared for in illness during

*Read before the Hospital Conference, held in San Francisco, June 24-25, 1921.

this period of her training. In return, she cares, to some extent, for the sick in the hospital, under expert supervision, which is even a part of this education.

Merely Old Apprenticeship System.

In this relationship of the school to the hospital, which is clearly that of a system long considered obsolete, mainly, the apprenticeship system, it very naturally follows that the training of the nurse is influenced by conditions in the hospital, such as the purpose of the hospital, whether private or public, the type of services, whether or not it is a teaching institution, its point of view in relation to the school, its source of funds and other obvious considerations. The school is always subject to uncertainty that may arise from change of administration in the hospital and nothing is more detrimental to the students than changes in the school's administration. The theoretical work is constantly interrupted by emergencies occurring in the hospital and affiliations for the necessary experience for the student in services which the hospital does not provide, are either not given, withdrawn or curtailed, due to the falling off in the number of students or other emergencies. The hospital must be staffed to carry on its work. This leads often to taking in the unqualified applicant, physically and mentally unfit, and of immature age, carrying her through the course to the detriment of the hospital and sending her out as a poor representative of the school, which in time reacts unfavorably on both hospital and school.

Under this system, the hospitals have endeavored to carry on an educational function, often with small financial resources and without sufficient facilities for the purpose. Without exception, our schools of nursing have no independent support; there is not a fully endowed school in the United States. With but few exceptions, schools have no separate budget; the funds for maintaining them come out of the general hospital fund. It has been difficult to estimate the actual cost per student, as this is included in the general hospital bookkeeping. There has not been, to my knowledge, any authentic estimate made of the actual value, in figures, of the student's services in the hospital and, until this has been done, we have no basis on which to estimate the actual cost of the school.

No Schools Self-Supporting.

With possibly one exception, no schools are self-supporting. In very few schools do students pay for their education or their maintenance. In one school in Massachusetts students pay a tuition fee of \$125 a year. Their experience is gained in the community in which the school is located and for which the school is reimbursed. In another school in Maryland, an admission fee of \$100 is required, and in others there are tuition fees ranging from \$10 to \$50. In this state, the Seventh Day Adventist schools have a system whereby the student pays for tuition and maintenance and also receives a stipulated sum for her services. The money allowance to students varies from \$5 to \$30 a month. In addition to this, in certain schools, uniforms and textbooks are provided. In some schools, liberal scholarships are given, ranging from \$25 to \$250; loan funds are also provided. In this state, several hospitals are providing scholarships and loan funds as well.

There is no system of education in the world today that exists under these conditions, and it is to be wondered that it has been able to maintain itself as long as it has. Until recent years, schools of nursing have been isolated from participation in general educational movements, which has emphasized this system and has placed the schools at variance with any form of education work. In the minds of many, the school is regarded as an institution of labor, which found expression in the last legislature of California, when a minimum wage for students was proposed. Surviving this serious handicap, it is truly surprising that the schools have built up ideals of service and devotion which are found, as a rule, in the students. Formerly, when few occupations were open to women and facilities for higher education were more restricted, our schools were able to attract in greater numbers, but with the opening of wider opportunities, they are now brought into competition with other fields of education.

Presumably, our scheme of civilization today included, in its program, competent and well-trained nurses, and our schools must exist and produce—produce in far larger numbers than we are doing at present—if we are in any way to meet the ever-increasing demand. From these schools must be sent out the great army of nurses which society is now calling for, and which it seems impossible to satisfy. From them must arise our leaders in teaching and administration—our superintendents, supervisors, head nurses—wherewith to staff our hospitals. From them must be sent out our public health nurses and the obligation to do this work, which is virtually a public function, now rests wholly upon the hospital.

Nursing Education Is of Public Concern.

If the present system is outworn and obsolete, how can we create another that will be more in accord with present day needs? If well-trained nurses are necessary in our scheme of civilization, if they are as necessary as the teacher, should their education not be as much a matter for public concern as that of the teacher and the schools in which they are trained, should they not be within the educational system of the state? This idea is not a new one, neither does it originate with me; it has long been discussed by nurse educators and is already beginning to take tangible form. First, in universities; and, secondly, in junior colleges. In the first instance, I may illustrate by an example, the University of the City of Cincinnati, where the school operates under a city charter, has its own appropriation and pays its own expenses. In the second instance, as in Kansas City, Grand Rapids and Detroit, the city board of education, in its junior college department, provides the instruction and instructors for the preparatory period; the students from six schools in Kansas City go to the junior college for four hours each day of the week, except Saturday. Here the board of education also provides two nurse instructors, certified as high school teachers to give the instruction in purely nursing subjects. This is the most forward move that has been made so far by a board of education in taking over a part of the education of a student of nursing. It is still imperfect, in that the hospitals during this period provide full maintenance for the students, for which the latter give from two to four hours service in the wards, under supervision. The advantage may be that the student has already established her connection with the hospital and for these

hours each day is connecting up her instruction at junior college with her bedside work. Imperfect, however, as this may yet be, there is much to be thought of in such connection.

In this state, some small advance has been made by having certain preparatory subjects given in the high school, but this has been irregular, the schools withdrawing the pupils sometimes during the course, or the high school closing the course for lack of funds.

The experience of the past few years has brought to us sharply the impossibility of continuing on this basis—the hospital supplying education, maintenance, allowance, scholarships, loan funds—the students giving a service, which, for a great part of their residence in the school, is of doubtful value to the hospital. It would seem that the time is here when we must give deep study and have concerted action on, at least, some outstanding policies that will lead eventually toward placing the schools on a more economically independent basis. We can not hope in the immediate future for endowments to any extent or for state aid, but we may, at least, prepare the way by showing that the function of educating and training young women for the important work they are being called upon for by our communities is not a matter of private interest, but is virtually a public concern, and the responsibility of carrying this on should no longer rest entirely on the hospital.

BRONCHO-PULMONARY SPIROCHETOSIS.

The occurrence of broncho-pulmonary spirochetosis is comparatively rare. This circumstance, together with the peculiar characteristics of the disease, makes it a particularly individual problem. The victims of this disease are apparently suffering from tuberculosis. They have recurring hemoptysis for months. Usually chronic bronchitis, with loss of weight, emaciation, and a chronic cough ensue. Hemorrhages sometimes last for weeks and then may stop for weeks. These cases are not tuberculosis, however, for upon examination of the sputum no tubercle bacilli are found but large numbers of motile spirochetes. Bloedorn and Houghton in a report of three cases found that these organisms are more refractive and active than the *treponema pallida*, and that they tended to be of two distinct types. One type was thin, delicate, and threadlike with more regular and numerous undulations; the other type was coarser, with few undulations and heavier staining.

There has been little investigation made upon this disease. Castellani first described it in 1906. Since then there have been reports of cases occurring for the most part in the tropical climates. It is probable that the disease is more common in the United States than is realized, but because of its close symptomatic resemblance to tuberculosis, it is seldom recognized until the sputum is examined and the characteristic organism identified. Cases respond to treatment with the arsphenamins very readily. There have been cases which, when treated for tuberculosis were considered hopeless, but when treated with arsphenamin have recovered completely.

In view of the fact that this disease is more prevalent than is realized and that it does respond to treatment, it is important that every case of supposed tuberculosis that does not show tubercle bacilli in the sputum should be carefully examined for spirochetosis and syphilis. Prompt and intensive treatment with the arsphenamins may be expected to produce well-nigh miraculous results.

VITALITY OF RACE STOCKS IN CALIFORNIA.

By L. E. Ross, State Registrar of Vital Statistics.

During the past ten years there has been a phenomenal increase in the population of California. Between the census of 1910 and that of 1920, a period of 116.5 months, the population of the state increased 1,049,312, or 44.1 per cent. With this knowledge comes a desire to know more about the present population than merely its numerical strength. What races make up our population? What is the proportion of each to the total? And, probably more important still, what are the characteristics of the various races within our borders with reference to fecundity, birth rate, death rate and rate of infant mortality? The health and vigor of the different race stocks is a matter of public concern and a fair indication of these factors may be found in the vital statistics of the state.

The last census reveals the fact that between 1910 and 1920 increases in the various races in this state occurred as follows:

	1910	1920	Increase	
			Number	Per cent
White -----	2,259,672	3,264,711	1,005,039	44.4
Negro -----	21,645	38,763	17,118	79.1
Indian -----	16,371	17,360	989	6.0
Chinese -----	36,248	28,812*	7,436*	20.5*
Japanese -----	41,356	71,952	30,596	74.0
Other -----	2,257	5,263	3,006	133.2

*Decrease.

The greatest per cent of increase occurred among those races classed as "other," the Negro holding second place, Japanese third, the white race fourth, Indians fifth, and Chinese following with a decrease. Considered from the standpoint of numbers, the white race leads by a margin of some 975,000, with Japanese second, and Negro, other, Indian and Chinese following in the order named.

The white race apparently is not losing in relative strength, but is not advancing as rapidly as one or two of the other races. Between 1910 and 1920 the whites advanced from 95 per cent of the total population to 95.3 per cent; Negroes from 0.9 per cent to 1.13 per cent; Japanese from 1.7 per cent to 2.1 per cent. During the same period the Indians fell back from 0.7 per cent to 0.5 per cent, and the Chinese from 1.5 per cent to 0.8 per cent.

There are two methods by which a population may increase. First, what is called "Natural increase," or the excess of births over deaths. Second, an excess of immigration over emigration. Between the two censuses the natural increase in the white race was 43,106—that is, there were that many more births than deaths. The difference between this figure and the total increase of the white population shows the

approximate excess of migration to the state. Results for the various races follow:

Race	Total		Births exceeded deaths	Deaths exceeded births	Arrivals exceeded departures	Departures exceeded arrivals
	Increase	Decrease				
White -----	1,005,039		43,106		951,933	
Negro -----	17,118			2,648	19,766	
Indian -----	989			1,331	2,320	
Chinese -----		7,436		3,353		4,083
Japanese ----	30,596		19,891		10,705	

In any discussion involving births, incomplete birth registration is a disturbing factor. About 93 per cent of all white births in California are registered. Negro and Indian births are poorly registered. The Chinese registration is fairly complete, especially for males. Japanese births are doubtless 100 per cent registered.

In the above table, Negro and Indian deaths exceed registered births, and, therefore, the excess of arrivals over departures is greater than the total increase in the population. This is probably erroneous in both cases. It is not likely that Negro deaths exceeded births, nor is it probable that 2,320 Indians migrated to California during this period. Faulty birth registration is no doubt the cause of these discrepancies. The Chinese also show a large excess of deaths over births, but this natural decrease in population is 4,083 short of the decrease indicated by the census. With birth and death registration fairly complete for the race, there must have been about 4,000 Chinese departures in excess of arrivals in the state.

The Japanese show a most remarkable excess of births over deaths. In fact, 65 per cent of the total increase indicated by the census is due to this cause, with only 35 per cent due to excess of arrivals over departures. The table above shows 10,705 increase due to migration. Figures compiled by the State Board of Control, using official immigration records, show this as 24,592 for the same period.

The relative fecundity of the various races in the state is indicated by an examination of the births in relation to the population.

	1920 Per cent of population	1920 Per cent of births
White -----	95.3	90.9
Negro -----	1.1	0.7
Indian -----	0.5	0.2
Chinese -----	0.8	0.8
Japanese -----	2.1	7.4

The white race, comprising 95.3 per cent of the total population, contributed only 90.9 per cent of the births. The Negroes and Indians show the same characteristic, and for the Chinese the percentages are equal. Here again we find the Japanese a remarkable race. Being only 2.1 per cent of the population, according to the census, this race contributed no less than 7.4 per cent of all the births in this state during 1920. For the state as a whole about every fiftieth person is a Japanese, but every fourteenth baby is of this race.

Relative vitality of the different races is indicated by the deaths.

	1920 Per cent of population	1920 Per cent of births
White -----	95.3	94.2
Negro -----	1.1	1.4
Indian -----	0.5	0.5
Chinese -----	0.8	1.6
Japanese -----	2.1	2.1

The position held during the year by the white race was very favorable with reference to mortality, the per cent of deaths being less than the per cent of population. The Negro and Chinese show excessive death rates, while for the Indians and Japanese the percentages are equal.

During 1920 the white race, contributing 90.9 per cent of all the births, suffered 91.1 per cent of all the infant deaths and 92.4 per cent of the stillbirths.

	Per cent of births	Per cent still- births	Per cent infant deaths
White -----	90.9	92.4	91.1
Negro -----	0.7	1.4	1.2
Indian -----	0.2	0.4	0.7
Chinese -----	0.8	0.7	0.7
Japanese -----	7.4	5.1	6.7

Both the stillbirths and infant mortality were high for the Negroes and Indians. The Chinese show a much more favorable record, the per cent of births being higher than either stillbirths or infant deaths. This is also true of the Japanese, the stillbirths being even more favorable than the infant mortality. From the above, it is seen that the records of the Oriental races are the only favorable ones with reference to stillbirths and infant deaths, the white, Negroes and Indians all showing up unfavorably in the comparison.

A study of the various races with reference to rates for births, deaths, stillbirths and infant mortality, throws additional light upon this important subject.

	1920			
	Birth rate	Death rate	Stillbirth rate	Infant mortality rate
White -----	18.4	13.4	31.3	74.9
Negro -----	12.5	16.9	56.5	125.0
Indian -----	7.1	13.9	73.2	284.6
Chinese -----	17.7	27.2	27.8	65.5
Japanese -----	67.6	13.6	20.9	68.0

Comparison of the birth and death rates for the white race shows a substantial excess of births over deaths, although the birth rate is low. The rates for stillbirths and infant deaths are good, but are unfavorable when compared with the Orientals. The infant mortality rate for the entire population is very favorable when compared with other states.

Faulty birth registration is probably the cause of the Negro and Indian birth rates being smaller than the death rate. This further causes a higher figure for both stillbirths and infant mortality for these rates are computed with births as the base. It is known, however, that infant mortality is high for these two races, especially among the Indians.

The Chinese death rate is higher than the birth rate, and this probably reflects the true condition. The Chinese are doubtless older, on an average, than any race stock in the state, and it is to be expected that in time the operation of the exclusion law will result in a higher death rate, but both the infant mortality and stillbirth rates are very low, much lower than the corresponding rates for the white race. Evidently they have a smaller proportion of stillbirths and relatively fewer infant deaths than the whites.

The feature of all vital statistics in California is the Japanese. The birth rate for this race in 1920, using the population given by the census, is no less than 67.6. There is not its parallel in the history of vital statistics anywhere in the world. Supplementing this phenomenal birth rate, we find an infant mortality rate of only 68, a full 7 points lower than the white rate, coupled with a stillbirth rate of 20.9, almost 12 points lower than the whites. These figures show that while the Japanese are reproducing more than three times as fast as the white race in California, they are saving more of their babies and a much greater proportion are born alive. At the same time, we find their death rate practically the same as that of the white race.

A study of the vital factors affecting the several race stocks in California, as shown by the vital statistics records, leads to the conclusion that there is no race within our borders than can compare with the Japanese in rate of reproduction and vitality. Their birth rate is high, and their death rate low. Japanese mothers have stillbirths less frequently than women of any other race in the state, and the infant mortality is lower than for any race, except the Chinese. In 1920 alone, the Japanese increased their population 5.4 per cent by reproduction, while the white race increased 0.05 per cent, one-tenth as fast.

Aside from the Japanese, the white race is the only other showing from the vital statistics records an increment by reason of excess of births over death. When compared with their proportion of the total population, the whites show a low rate of reproduction, and a low death rate. This, however, is coupled with a high proportion of stillbirths and infant mortality.

Negroes and Indians show uniformly unfavorable characteristics in the vital records, with low birth rates and high rates for deaths, stillbirths and infant mortality.

The only unfavorable characteristic of the Chinese vital statistics is the high death rate. The birth rate is satisfactory and the rates for stillbirths and infant mortality are low.

EPIDEMIOLOGY.

FRANK L. KELLY, M.D., Epidemiologist.

DIAGNOSTIC INVESTIGATIONS.

<i>Locality.</i>	<i>Condition suspected.</i>	<i>Findings.</i>
Riverside -----	Smallpox -----	Smallpox.
Pasadena -----	Stomach rash -----	Smallpox.
Valley View, Santa Clara County -----	Smallpox -----	Smallpox.
Richmond -----	Smallpox -----	Chickenpox.
Hollister -----	Plague -----	Bubonic plague.
Tracy -----	Food poisoning -----	Bacillary dysentery.
Corte Madera -----	Smallpox -----	Chickenpox.
Oakland -----	Plague -----	Staphylococcus infection.
Albany -----	Smallpox -----	Smallpox.
Oakland -----	Chickenpox -----	Chickenpox hemorrhagic.
Sacramento -----	Dengue -----	Dengue.

EPIDEMIOLOGICAL INVESTIGATIONS.

- Eighty-eight smallpox vaccinations at La Verne.
- An investigation of smallpox at Piedmont.
- An investigation of diphtheria at Los Altos.
- An investigation of typhoid fever at Collinsville.
- An investigation of rabies at Glendale.
- An investigation of typhoid fever at Dinuba.
- An investigation of diphtheria at Ross.
- An investigation of typhoid fever at San Lorenzo.

MORBIDITY.

JUNE, 1921.

Diseases	June 4	June 11	June 18	June 25	July 2	Total June, 1921	Total June, 1920
Anthrax -----							
Beriberi -----							
Cerebrospinal meningitis -----	2	6	3	2	6	19	17
Chickenpox -----	199	191	132	105	94	721	387
Cholera, Asiatic -----							
Dengue -----	1					1	
Diphtheria -----	149	172	126	109	105	661	444
Dysentery amoebic -----		2	1	2		5	} 29
Dysentery bacillary -----	4	1		1	8	14	
Encephalitis lethargica -----	2	5	2		2	11	14
Erysipelas -----	18	16	8	11	9	62	46
German measles -----	4	4	5			13	35
Glanders -----							
Gonorrhoea -----	73	93	51	60	56	333	503
Hookworm -----				1		1	1
Influenza -----	14	22	27	10	14	87	51
Leprosy -----		1			3	4	2
Malaria -----	8	4	5	9	7	33	19
Measles -----	330	326	265	197	169	1,287	1,397
Mumps -----	208	212	124	40	69	653	401
Ophthalmia neonatorum -----							2
Paratyphoid fever -----							
Pellagra -----	1					1	4
Plague -----			1			1	
Pneumonia -----	80	57	39	40	33	249	141
Poliomyelitis -----	3	1	2	5	2	13	6
Rabies -----					1	1	
Rocky Mt. spotted fever -----		1		1		2	
Scarlet fever -----	91	89	71	91	66	408	239
Smallpox -----	97	96	76	74	70	413	293
Syphilis -----	78	116	43	78	46	361	400
Tetanus -----	2	1		1	1	5	5
Trachoma -----	6	1			1	8	8
Trichinosis -----							
Tuberculosis -----	120	177	162	101	168	728	831
Typhoid fever -----	10	22	19	21	23	95	193
Typhus fever -----							
Whooping cough -----	90	86	80	78	58	392	655
Yellow fever -----							
	1,590	1,702	1,242	1,037	1,011	6,582	6,123

SANITARY INSPECTIONS.

EDWARD T. ROSS, Chief Sanitary Inspector.

The greater part of the month was spent in connection with work relating to mountain sanitation. In order to facilitate this important work, the appointment of an additional inspector was authorized. The board appointed Mr. W. O. Deal to this position. Mr. Deal is well fitted for this work, having had over fifteen years' experience in general sanitation in the United States Public Health Service.

During the month 22 summer resorts, 27 automobile camp grounds and 106 roadside camps were visited. Over 1,200 miscellaneous camp notices and regulations were posted in camps, along roads and streams. In addition, over 1,200 such notices were distributed to health officers and others. Of these, 580 were sent to various water companies, for posting on their watersheds. At the request of the United States Forest Service, 3,750 notices were sent to the supervisors of the various national forests in the state.

In a number of the summer resorts visited it was found that practically all of the board's recommendations for the improvement of sanitary conditions had been complied with, sanitary plumbing facilities having been provided, also septic tanks or covered cesspools for the disposal of sewage; food supply rooms had been screened, proper receptacles for the keeping of garbage provided, and much general cleaning had been done. As a result of the improvements made, sanitary conditions were found to be satisfactory in the following resorts:

Ætna Springs, Napa Soda Springs, Sonoma Grove, Walters Springs, White Sulphur Springs, Boyes Springs, Inverness Inn, Indian Falls Lodge, Almanor Inn, Feather River Inn, Castle Crag, Crag View.

Improvements are being made as rapidly as possible by the owners of the other resorts visited.

In many of the auto camp grounds visited it was found that the board's regulations had been complied with. In addition to the requirements, many of the camp owners have provided shelter booths, shower baths, reading rooms, gas plates (25-cent meters), various kinds of cook-stoves, tables, benches, etc. In one instance, where the camp is located in the rice belt, the cooking and eating booths are entirely covered with metal screen. Conditions and equipment were exceptionally good in the following municipal camps:

Nevada City, Willows, Corning, Redding, Chico, Oroville, Sonora, Marysville, Napa, Santa Rosa, Sacramento, Orland, Roeding Park in Fresno, and a private camp near Redding, owned by Mr. J. Dieselhorst.

Following complaints received, investigations were made of the sewage disposal systems at Yreka, Weed, Shastina and Dunsmuir. It was found that all of these places are discharging their sewage into either creeks or rivers. These insanitary conditions were referred to the Bureau of Sanitary Engineering.

An investigation was made of the rabies situation in Sacramento County. During the period January 1, 1921, to June 1, 1921, two human deaths occurred from rabies, 12 positive cases of rabies in dogs were reported, and 21 people who were bitten by these rabid animals received Pasteur treatment. On June 2d the matter of adopting dog

control measures was taken up with the board of supervisors, and was referred by said board to the judiciary committee and the district attorney to be taken up again at the next meeting of the supervisorial board on June 15th. At this meeting further action on the matter was deferred, as the situation seemed to be improving. Several investigations were made of cases in which people had been bitten by dogs supposed to be rabid. None of these animals proved to have the disease.

Over 100 miscellaneous premises were inspected, a number of complaints relative to insanitary conditions were investigated, and over 70 sanitary reports covering the inspection of summer resorts, mountain camps, etc., were submitted.

SUMMARY OF INVESTIGATIONS.

Summer resorts—

Inspected	22
Placed in sanitary condition	12
Sanitary toilets installed	22
Vault toilets demolished	11
Septic tanks installed	11
Covered cesspools provided	10
Metal garbage receptacles provided	21
Premises thoroughly cleaned	12

Auto camp grounds—

Inspected	27
Complied with regulations	19
Sanitary toilets provided	38
Toilets connected with city sewer system	32
Toilets connected with cesspools	6
Vault privies provided	16
Metal garbage receptacles provided	67
Roadside camps inspected	106
Camp notices posted	648
Warning notices posted	435
Camp regulations posted	196
Miscellaneous camp notices and regulations sent to the United States Forest Service officials, health officers and others	4,994

Investigations and inspections—

Rabies	8
Sewage disposal	4
Complaints	16
Miscellaneous premises inspected	119
Sanitary reports submitted	77

BUREAU OF COMMUNICABLE DISEASES.

REPORT FOR JUNE, 1921.

DIVISION OF THE HYGIENIC LABORATORY.

W. H. KELLOGG, M.D., Director.

Report of Examinations Made by the California State Hygienic Laboratory During the Month of June, 1921.

Condition suspected	Posi- tive	Nega- tive	Incon- clusive	Total	Units
Diphtheria -----	296	665	159	1,020	1,020
*Diphtheria (special investigation)-----	17	148	-----	165	165
Diphtheria (virulence test)-----	1	-----	-----	1	20
Dysentery (excreta) -----	1	5	-----	6	45
Gonococcus infection -----	36	88	56	180	720
Leprosy -----	-----	1	-----	1	5
Malaria -----	-----	31	-----	31	775
Meningitis -----	2	-----	-----	2	10
Paratyphoid (Widal test)-----	4	1	-----	5	50
Rabies -----	5	19	-----	24	1,200
Syphilis (Wassermann test)-----	244	940	61	1,245	6,225
Tuberculosis (sputum) -----	47	156	-----	203	609
Tuberculosis (spinal fluid)-----	1	-----	-----	1	40
Tuberculosis (excreta) -----	-----	1	-----	1	5
Typhoid (Widal test)-----	20	67	2	89	890
Typhoid (excreta) -----	-----	19	-----	19	95
Miscellaneous -----	-----	-----	-----	4	20
Pasteur treatments (inoculations)-----	-----	-----	-----	155	1,550
Totals -----	-----	-----	-----	3,152	13,444

*Ross 61; Sierra Madre 53; Los Angeles County 51.
159 no growth.

Summary of examinations Made in the California State Hygienic Laboratory During the Month of June, 1921.

Condition suspected	Posi- tive	Nega- tive	Incon- clusive	Total	Units
Main laboratory at Berkeley:					
Diphtheria -----	144	303	¹ 53	500	500
*Diphtheria (special investigation) -----	13	48		61	61
Diphtheria (virulence test) -----	1			1	20
Dysentery (excreta) -----	1	5		6	45
Gonococcus infection -----	24	33	43	100	400
Malaria -----		27		27	675
Meningitis -----	2			2	10
Paratyphoid (Widal test) -----	3	1		4	40
Rabies -----	2	17		19	950
Syphilis (Wassermann test) -----	244	940	61	1,245	6,225
Tuberculosis (sputum) -----	42	117		159	477
Tuberculosis (spinal fluid) -----	1			1	40
Typhoid (Widal test) -----	6	35		41	410
Typhoid (excreta) -----		7		7	35
Miscellaneous -----				3	15
				2,176	9,903
Southern Branch at Los Angeles:					
Diphtheria -----	150	350	² 6	506	506
†Diphtheria (special investigation) -----	4	100		104	104
Gonococcus infection -----	12	55	13	80	320
Leprosy -----		1		1	5
Malaria -----		1		1	25
Paratyphoid (Widal test) -----	1			1	10
Rabies -----	3	2		5	250
Tuberculosis (sputum) -----	5	36		41	123
Tuberculosis (excreta) -----		1		1	5
Typhoid (Widal test) -----	13	28	1	42	420
Typhoid (excreta) -----		12		12	60
Miscellaneous -----				1	5
Pasteur treatments (inoculations) -----				24	240
				819	2,073
Northern Branch at Sacramento:					
Diphtheria -----	2	12		14	14
Malaria -----		3		3	75
Tuberculosis (sputum) -----		3		3	9
Typhoid (Widal test) -----	1	4	1	6	60
Pasteur treatments (inoculations) -----				131	1,310
				157	1,468
				3,152	13,444

*Ross 61. †Sierra Madre 53; Los Angeles County 51.

¹53 no growth. ²6 no growth.

DIVISION OF PARASITOLOGY.

Summary of Examinations Made in the Division of Parasitology During the Month of June, 1921.

Total specimens examined	132
Total examinations for protozoa	132
Total examinations for worms	132

Positive examinations:

Protozoa—		Worms—	
Endamoeba dysenteriae	18	Hookworm	6
Flagellates—		Oxy. incog.	2
Giardia	5	Trichurias	4
Chilomastix	4	Oxy. verm.	1

PREVENTIVE THERAPEUTICS.

Pasteur Treatments for the Prevention of Rabies by the State Hygienic Laboratory During the Month of June, 1921.

	Treatment commenced	Treatment completed
Main Laboratory at Berkeley	0	0
Northern Branch at Sacramento	1	8
Southern Branch at Los Angeles	1	2
Laboratory of Sacramento Board of Health by deputized bacteriologist	0	0
Laboratory of San Francisco Board of Health by deputized bacteriologist	0	0
Laboratory of Los Angeles Board of Health by deputized bacteriologist	0	0
Laboratory of San Diego City Board of Health by deputized bacteriologist	0	0
Laboratory of Letterman General Hospital, Presidio, by deputized bacteriologist	1	0
Laboratory of United States Naval Hospital, Mare Island, by deputized bacteriologist	0	0

Vaccine Issued by the State Hygienic Laboratory During the Month of June, 1921.

Mixed typhoid-paratyphoid vaccine:

Number of physicians and institutions to whom vaccine was sent	4
Amount of vaccine sent	14 c.c.

Ophthalmia Neonatorum Prophylactic Outfits Distributed During the Month of June, 1921.

Number of outfits, containing two ampoules each, issued	1,806
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BUREAU OF SOCIAL HYGIENE.

REPORT FOR JUNE, 1921.

ELIZABETH McMANUS, Director.

Reports received by the Bureau:

San Diego City Clinic.	Fresno County Hospital.
Boyle Avenue Dispensary—adults.	Stockton City Clinic.
Boyle Avenue Dispensary—children.	Sacramento City Clinic.
Graves Memorial.	Department of Public Health.
Pasadena Dispensary.	Stanford Medical Clinic.
Los Angeles City Clinic.	Public Health Center.
Good Cheer Club.	

Number of new cases admitted to clinics during month	275
Number of cases treated	1,769
Number of new cases brought in by social workers	118
Cases discharged or discontinued treatment	450
Visits to clinics for treatment, examination and advice	7,177
Number of cases reported by physicians:	
Syphilis	359
Gonorrhoea	423
Number doses arsphenamine distributed by the Bureau	46
Number doses arsphenamine administered by clinics in June	99
Laboratory examinations:	
Wassermann tests	2,628
Microscopic examinations for gonorrhoea	575
Requests for pamphlets received	119
Pamphlets distributed	6,406
Number lectures given	15
Number slide showings	1
Number film showings	5
Four film showings in conjunction with lectures, making nine in all.	
Number of visits made by social workers of Bureau:	
(a) To cities (10,000 and over population)	7
(b) To rural communities (under 10,000)	7

ARSENOBENZOL REPORT FOR JUNE, 1921.

Number of ampoules distributed:

Good Cheer Club	12
White Memorial	10
Orange County Health Department	24
	46

Treatment reports received:

13 patients received 1 treatment	13
11 patients received 2 treatments	22
9 patients received 3 treatments	27
3 patients received 4 treatments	12
5 patients received 5 treatments	25
	99

1 ampoule broken.

Patients treated:

22 school children	22
6 no occupation	6
2 housewives	2
6 laborers	6
4 infants	4
	41

Treatments given:

Good Cheer Club	11
Orange County Health Department	11
Arroyo Sanitarium	2
University of California Clinic	44
Boyle Avenue Dispensary	31
	99

1 ampoule broken.

Patients treated by—

Good Cheer Club	5
Orange County Health Department	6
Arroyo Sanitarium	2
University of California Clinic	13
Boyle Avenue Dispensary	15
	41

Total number of ampoules distributed	22,962
Total number of treatment cards received	22,965

BUREAU OF TUBERCULOSIS.

REPORT FOR JUNE, 1921.

EDYTHE TATE-THOMPSON, Director.

Unique in the history of California was the recent dedication of the sanatorium at Ahwahnee, the Madera, Merced and Stanislaus County sanatorium. Located in the foothills of the high Sierras, at an elevation of three thousand feet, lies a wooded valley that the Indians in the early days of California named "Ahwahnee," which in Indian lore means "deep valley." Stretching on either side are the Sierras, snow-capped part of the year, but the valley itself is filled with wild flowers, wonderful pines, liveoaks and sunshine that seems eternal. With such a background it needed little inspiration to fit in with the rambling old hotel there. A style of architecture that in the course of building brought many passing motorists in to know when the new hotel was to be finished. It certainly doesn't look like a hospital, for at each end of the wards are solariums with fireplaces, so that patients in the wards will have a variety of places to take their rest. There are long verandas on all sides of the buildings and beautiful semiprivate and private rooms. The lighting problem has been solved with floor lamps beside each bed. There are two fine buildings for ambulatory patients and an infirmary connected with the main building. There is a splendid big dining hall with a cafeteria and every comfort imaginable. Perhaps people in the cities do not know the isolation of the high Sierras, when some member of the family is taken sick, perhaps it has not occurred to the average city dweller that in the great San Joaquin Valley people for years have gone "into the hills" to recover from tuberculosis, so that in choosing this site this was taken into consideration.

We expected on that day of dedication, which it was in every sense of the word, a few people from the main highway towards Wawona, but by afternoon in Fords, on horseback and on foot people began coming. A great many had tales to tell of the fight against tuberculosis that they had bravely made alone in those fields, and had won out, so "they" took people through the buildings, and before night came there was no question of injunction proceedings to close up the hospital, such as we encounter occasionally. Indeed not, it was "our hospital," and along towards evening, when word came that the Madera band was en route and a neighbor who lived some three miles way had loaned a piano, and the rest of us turned in and helped get ready to feed the dancers at midnight, for the larger ward in one of the infirmary wings was to be used for that purpose, I began to wonder if the moonlight which had turned night into almost day had gone to my head. Cowboys from the cattle ranges of the Sierras, shepherders and the biggest taxpayers of the counties went through the buildings and exclaimed their satisfaction of the plan. So it wasn't any wonder that along late in the evening the supervisors met and decided on the rest of the building program. At midnight the dancers lined up cafeteria fashion and supper was served. As the first faint streaks of the dawn showed faintly in the sky the cowboys, back in their "chaps" and sombreros, lined up at the gate, pointed their pistols in the air, fired three shots and departed.

The following day I went into the kitchen to thank "Wong," the Chinese cook, for all he had done to help make the dedication a success, for he had supplied wonderful food in amounts that seemed endless. After I thanked him he said, "Great place for hospital, gleet idea, takee care slick floks, gleet day." And he was right, it was a great day. As an antidote for bolshevism it should be recommended.

Five years ago somebody, keen for law and order, wanted to make the subsidy law mandatory. We are glad it was never done. No law enforcement could have carried with it to the people of those counties the spirit of service that the hospital has brought them.

I did not mention above the fine herd of thoroughbred Holsteins, the chickens and the farm, or the staff at the sanatorium, because anybody could not need to question what the "accoutrements" would be in such a place.

The remainder of the month has been spent with the motor clinic and in organizing some surveys.

Hospitals inspected:

Santa Barbara, Los Angeles, San Bernardino, Riverside, San Diego, Fresno, San Joaquin, Santa Clara, Arroyo, Ahwahnee, Seymours.

EXTERMINATING RATS BY POISON.

In exterminating rats either by poisoning or by trapping it is important to bear in mind that success depends largely on the degree to which the removal of other foods makes the poisoned bait or the bait in the traps attractive to the rat. A variety of poisons may be used, barium carbonate, phosphorus, arsenic, and others, but even with an efficient poison, failure often results through lack of attention to details.

HOW TO USE BARIUM CARBONATE.

- I. **KIND OF BAIT.** Three or more kinds of bait should be used. Each must be mixed separately with barium carbonate. One kind of bait from each of the following classes should be used:
 - (1) Meat or other animal substance; such as Hamburg steak, sausage, canned salmon, eggs or oysters.
 - (2) Fresh fruit or vegetable food; such as cantaloupes, tomatoes, green corn, baked sweet potatoes, bananas, etc.
 - (3) Miscellaneous foods; milk or cheese, peanut butter, bread, cake, cereals (raw or cooked).
- II. **How to Mix.** The barium carbonate must be thoroughly mixed with the bait, so that the rats can not eat the smallest portion of the bait without getting some of the barium carbonate. In the case of such substances as Hamburg steak, cheese, etc., use one part of barium carbonate to four parts of bait. Mix thoroughly with a spoon.
Substances which can not be thoroughly mixed with the barium carbonate as just described (for example, cantaloupe, tomatoes, etc.) should be cut into small pieces and thoroughly covered with the barium carbonate, and then worked in with a knife.
- III. **How to Set Poison.** The three kinds of bait, prepared as above, should be divided into small portions about a teaspoonful each and placed freely about premises, alternating baits 1, 2, 3. It should be set at short intervals, not over ten or fifteen feet. *Do not mix the different kinds of bait with each other.*
- IV. **GENERAL INSTRUCTIONS.** The morning after baiting, look for dead rats and remove them. Take up baits. Examine these so as to see which have attracted most rats. If any kind of bait has not been touched, use a different bait instead of this. Fresh bait should be used each night.
- V. **How Often to Bait.** Bait every night, as long as rats continue to eat bait.
- VI. **CAUTION.** Keep fowls, dogs, cats, etc., away from bait.

ANTIDOTE.—An emetic, followed by Rochelle or Epsom salts.

—U. S. Public Health Service.

BUREAU OF VITAL STATISTICS.

REPORT FOR APRIL, 1921.

L. E. Ross, Director.

The mortality record for 1921 continues favorable, compared with last year. During the first four months of 1920 there were 18,677 deaths. In the same period this year 16,434 have been registered and entered, to which must be added 230 delayed certificates not yet tabulated, bringing the total to 16,664. The present month, however, shows an increase over April of last year, the figures being 3,958 this year and 3,662 for April, 1920.

April births registered during April numbered 5,485, a decrease of 259 compared with last month. The present month, however, shows a substantial gain over April of last year, 5,277 births having occurred in that month. So far this year a total of 23,132 birth certificates have been received, of which 22,696 have been tabulated, the balance having been received too late to enter in current work. During the first four months of 1920 a total of 22,078 births were registered.

The number of marriages thus far registered this year is 417 greater than during the same period last year. A total of 13,612 certificates have been received. During the corresponding period last year 13,199 marriages were registered.

	Births	Deaths	Marriages
April—			
1920 -----	5,277	3,662	3 662
1921 -----	5,485	3,958	3,447
Indicated annual rate—April—			
1920 -----	18.2	12.6	12.6
1921 -----	18.3	13.2	11.5
January to April, 1921—			
Number -----	22,696	16,434	12,717
Annual rate -----	19.0	13.7	10.6
Daily average -----	189	137	106

There was another slight increase in the mortality from diphtheria during April, 46 deaths having been registered.

Measles shows a sharp decline, 17 deaths being reported, probably indicating the regular seasonal decrease in mortality from this cause.

Whooping cough increased from 21 deaths in March to 35 in April. The movement of mortality from measles and whooping cough so far this year is almost identical with last year, except that whooping cough took the lead over measles in March last year and in April this year. Although the whooping cough record is more favorable than for the same period last year, the present rate of increase is just as severe.

No improvement was made in the mortality from scarlet fever, there being an increase of one death over March.

Another increase in deaths from tuberculosis was registered in April. Usually this month marks the beginning of the mid-year decrease in deaths from this cause. As has been previously noted, the movement of tuberculosis mortality this year is somewhat unusual. There has been a steady rise in the number of deaths since September of last year:

present indications are that the seasonal decline will come later than for several years past.

Although pneumonia during this month caused more deaths than in April of either 1919 or 1920, there was a decrease compared with last month, 293 deaths. An unusual decline in deaths from pneumonia during April has been observed throughout the United States, the decrease being less in California than in many other states.

Diarrhea and enteritis caused 68 deaths in April. Ordinarily an increase is expected in these deaths during April, but the present month shows a slight decrease.

Another death from smallpox was registered during April. This makes seven so far this year, the same as for the entire year of 1920.

There was practically no change in the infant mortality situation during April, 410 infant deaths having been registered. This is a slight increase over April of last year, during which month 399 babies died. The record thus far this year, however, is much better than in 1920. During the first four months of last year there were 1,762 infant deaths compared with 1,654 this year, a decrease of 108. Infant deaths by principal causes for April follow:

	April, 1921	
	Deaths	Per cent
Communicable diseases	42	10.2
Diseases of the respiratory system.....	63	15.4
Diseases of the digestive system.....	54	13.2
Congenital causes	219	53.4
All other	32	7.8
Totals.....	410	100.0

The heavy mortality from congenital causes increased in April. In January this cause was 48.6 per cent of the total, in February 49.9 per cent, in March 51.1 per cent, and in April 53.4 per cent.

The following analyses are made monthly by the Bureau of Vital Statistics and can be furnished upon application:

Births:

Counties and cities, by sex, race and maternal nativity.
Age of mother, by race and number of previous issue.
Stillbirths, by county and city.

Deaths:

Counties and cities, by sex, race and nativity.
Counties and cities, by principal causes of death.
Cause of death (detailed international list), by sex, race, nativity and age.
Tuberculosis deaths: County and city, by sex, race, nativity, age, length of residence and occupation.

Infant mortality (deaths under 1 year of age):

Counties and cities, by sex, race and maternal nativity.
Principal causes of death by age groups.

Marriages:

County totals.
Nativity of bride and groom, correlated.
Marital condition of bride and groom, correlated.
Age of bride and groom.
Race of contracting parties.

DEATHS FROM PRINCIPAL CAUSES—CALIFORNIA.
Provisional Data for April, 1921.

Group No.		Number	Per cent
	Total -----	3,958	100.0
1	Typhoid -----	8	0.2
2	Malaria -----	2	0.1
3	Smallpox -----	1	---
4	Measles -----	17	0.4
5	Scarlet fever -----	13	0.3
6	Whooping cough -----	35	0.9
7	Diphtheria -----	46	1.2
8	Influenza -----	48	1.2
9	Dysentery -----	6	0.2
10	Poliomyelitis (acute) -----	4	0.4
11	Encephalitis lethargica -----	9	0.2
12	Meningococcus meningitis -----	452	11.4
13	Tuberculosis, lungs -----	72	1.8
14	Tuberculosis, other -----	29	0.7
15	Venereal diseases -----	25	0.6
16	Other general epidemic diseases -----	330	8.3
17	Cancer -----	124	3.1
18	Other general diseases -----	413	10.4
19	Diseases of nervous system -----	718	18.1
20	Diseases of circulatory system -----	293	7.4
21	Pneumonia -----	56	1.4
22	Other diseases of respiratory system -----	49	1.2
23	Diarrhea and enteritis—under 2 years -----	19	0.5
24	Diarrhea and enteritis—over 2 years -----	188	4.7
25	Other diseases of digestive system -----	301	7.6
26	Nephritis -----	49	1.2
27	Other non-venereal, genito-urinary system -----	44	1.1
28	The puerperal state -----	15	0.4
29	Diseases of the skin and cellular tissue -----	5	0.1
30	Diseases of the bones and organs of locomotion -----	39	1.0
31	Malformations -----	174	4.4
32	Early infancy -----	33	0.8
33	Senility -----	70	1.8
34	Suicide -----	260	6.6
35	Other external causes -----	1	---
36	Ill defined and unknown -----		

BUREAU OF SANITARY ENGINEERING.

REPORT FOR JUNE, 1921.

RALPH HILSCHER, Director.

NEWS NOTES.

The city of Turlock recently completed the building of a sewage treatment plant utilizing the activated sludge process.

The cities of Biggs and Davis will soon let contracts for construction of sewer systems and treatment plants embodying the Imhoff tank and sprinkling filter.

Imhoff sewage tanks are being built by the cities of Stockton, Selma and Patterson.

The city of Burbank is preparing plans for a sewer system with an activated sludge plant and final disposal on a 36-acre farm.

Santa Ana and Anaheim are planning a joint outfall sewer to the ocean to supersede present disposal on land.

Ceres is building a sewer system. The sewage will be treated in a settling tank with separate sludge digestion and disposed of on land.

Culver City, Glendale, Laguna Beach, Watts, Lodi, Madera, San Juan, Gilroy, and Visalia all contemplate early sewerage improvements embodying treatment plants.

A sewer system, including an intermittent sand filter plant, is planned for Yosemite Valley.

Municipal swimming pools have recently been built by Colusa, Alhambra, Los Angeles and Colton, and similar undertakings are being planned or agitated in Redlands, Glendale, South Pasadena, Chico, Fresno, Atascadero and Corona.

More than one-sixth of all swimming pools in the United States are located in California. California has twice as many pools as any other state in the Union.

A slow sand filter recently constructed at a swimming pool in Fresno, the first of its kind in the state, has proved very efficient and economical.

Steady progress is being made at Sacramento on construction of the new water plant. Shortage of funds makes it necessary to call another bond election before building the proposed filter plant. Such an election is planned for the near future.

The city engineer of Los Angeles is touring the country for the purpose of studying sewage treatment plants, preliminary to recommending a solution for the deplorable disposal situation confronting that city.

The city of Los Banos is building a slow sand filter with which to purify its water supply.

Collection and disposal of garbage is a problem now giving concern to the cities of Santa Barbara, Sacramento, Vallejo, Redding, Berkeley, Oakland, Fresno, San Francisco, Richmond, Los Angeles, Bakersfield, San Bernardino and Alameda.

Berkeley recently created a position of city sanitary engineer, the principal duties of the incumbent being to organize and supervise a system of municipal garbage collection and disposal.

The department of public works of the recently reorganized city government in Fresno has employed a special engineer to advise relative to the sewage disposal and garbage problems.

Following a case of severe arsenic poisoning that recently came to light, the cause was traced to a spring in Kern County, the water of which upon analysis showed a strong arsenic reaction. A danger sign has been placed beside the spring to warn other persons against drinking this water.

SUMMARY OF BUREAU'S WORK FOR MONTH ENDING JULY 15.

Plans received by Bureau:

- Proposed swimming pool at Atascadero.
- Sewer system and treatment plant at Davis.
- Preliminary map of proposed joint sewer outfall for Santa Ana and Anaheim.

Permit applications received:

- Santa Rosa, to operate swimming pool.
- Bowman, Albert Johns, to operate pool.
- Weaverville, municipal pool.
- Flintridge Country Club, Flintridge, to construct and operate pool.

Permits granted:

- Tulare, to operate water supply system.
- Reedley, to supply water from a new well.
- Biggs, to construct sewer system and disposal plant.
- Burbank, to use certain land as sewage disposal site.
- San Francisco, Lurline Baths, to operate pool.

Complaints received:

- Pasadena, regarding odors from Garfield sewer.
- El Portal, regarding nuisance created at hotel sewage disposal plant.
- Lakeport, regarding discharge of private sewer into ditch beside road.

Inspections made:

- Sacramento, water plant under construction.
- Contra Costa, San Pablo filter plant of East Bay Water Company.
- Long Beach, sewage screening plant.
- East San Pedro, proposed sewage treatment.
- Folsom Prison, activated sludge plant and water supply.
- Lodi, proposed site for sewage treatment works and water supply.
- Hermosa Beach, proposed site for sewage treatment works.
- Anaheim-Santa Ana, proposed ocean sewer outfall.
- Whittier, septic tank and sewer farm and water supply.
- Fullerton, sewer farm and treatment plant.
- Newport Beach, sewer system and Imhoff tank under construction.
- Seal Beach, Imhoff tank.
- Davis, proposed sewer system and treatment works.
- Turlock, activated sludge plant.
- Los Banos, water filtration plant under construction.
- Dos Palos, water works and sewage disposal.
- Marin Sanitary Districts Nos. 1 and 2, sewage disposal.
- Lafayette, Boy Scouts' Camp, water supply and proposed swimming pool.
- Oakland, Lake Temescal, of East Bay Water Company.
- Huntington Beach, water supply.

Swimming pools:

- At Berkeley—University of California, men's pool; University of California, women's pool; Y. M. C. A.
- At Oakland—Idora Park, Y. W. C. A.
- At Walnut Creek—Swimming hole in San Ramon Creek.
- At Alhambra—Municipal pool.

Office conferences:

- City Engineer, re Turlock sewage disposal.
- City Engineer, re Stockton sewage disposal.
- City Engineer, re proposed swimming pool at Atascadero.
- State Engineering Department, re sewage disposal at Patton Hospital.
- City Engineer, re sewage disposal at Laguna Beach.
- Consulting Engineer, re Marin Sanitary Districts Nos. 1 and 2.
- Consulting Engineer, re sewage disposal at Biggs.

Reports completed by Bureau:

- On sewage disposal at Burbank.
- On the water supply of Tulare.
- On proposed sewer system of Biggs.
- On test of Folsom Prison sewage plant.

LABORATORY WORK.

Los Angeles Office:

Bacteriological examinations of water	55
Chemical examinations of water (partial)	55

Berkeley Office:

Bacteriological examinations of water	254
Chemical examinations of water (partial)	271
Sanitary chemical examinations of water	1
Bacteriological examinations of sewage	9
Chemical examinations of sewage (partial)	11
Sanitary chemical examinations of sewage	2
Examination of sludge	2
Analysis of sand	1
Bacteriological examinations of bathing suits	2
Microscopic examination of water	1
Total samples submitted	290

BUREAU OF FOODS AND DRUGS.

REPORT FOR JUNE, 1921.

E. J. LEA, M.S., Director.

Two hundred and thirty-four samples of foods, drugs and miscellaneous materials were received at the laboratory during the month of June.

Official.		Unofficial—Continued.	
Beverages	27	Fruits	7
Bread	1	Herbs	1
Extracts	1	Ice cream	1
Feeds	7	Jams and jelly	6
Fish	1	Macaroni	1
Gelatine	8	Nuts	1
Honey	1	Syrups	1
Ice cream	7	Tomato products	3
Jam and jelly	10	Water	1
Macaroni	3		39
Meat	11	State Institutions.	
Milk	3	Butter	6
Noodles	2	Cereals	3
Nuts	1	Chocolate	1
Syrup	8	Chicory	1
	91	Coffee	17
Miscellaneous.		Corn starch	1
Citrate magnesia	8	Extracts	2
Camphor	1	Flour	3
Camphorated oil	6	Fruits	4
Essence of ginger	1	Hominy	1
Nifties	2	Pastes	3
Soap liniment	1	Salt	2
Tea leaves	3	Salad oil	1
Tincture iodine	2	Soda	1
Vinoba	1	Spices	4
	25	Sugar	1
Total official samples	116	Syrup	1
Unofficial.		Tapioca	1
Beverages	6	Tea	24
Catsup	2	Vegetables	1
Confectionery	2	Vinegar	1
Egg saver	1		79
Drugs	2	Total officials	116
Egg yolks	1	Total unofficials	39
Feeds	1	Total state institutions	79
Flour	2	Total	234

CONVICTIONS UNDER FOODS AND DRUGS ACTS REPORTED DURING JUNE, 1921.

Name of article	Offense	Accused dealer	Locality	Result
Camphorated oil	Adulterated	McCabe Pharmacy	San Francisco	O.R. 6 months
Citrate of magnesia	Adulterated	Dolores Pharmacy	San Francisco	O.R. 6 months
Citrate of magnesia	Adulterated	McCabe Pharmacy	San Francisco	O.R. 6 months
Noodles	Adulterated and mislabeled	Oakland Noodle Factory	Oakland	Fined \$10.00
"Orange soda"	Adulterated and mislabeled	Oriental Soda Works	San Jose	Fined \$50.00
Pork sausage	Adulterated and mislabeled	Oehl Packing Company	San Bernardino	Fined \$5.00
Soy bean noodles	Adulterated and mislabeled	Oakland Noodle Factory	Oakland	Fined \$15.00
Vinegar	Adulterated and mislabeled	Mrs. K. Lenner	San Jose	Fined \$10.00

ARTICLES OF FOOD CONDEMNED UPON PHYSICAL AND CHEMICAL EXAMINATION AS UNFIT FOR FOOD—JUNE, 1921.

Material	Amount	Condition	Locality	Disposition
Apple butter	225 cases	Decomposed	Los Angeles	Destroyed
Apples	48 boxes	Decomposed	San Francisco	Destroyed
Blackberry jam	54 cases and 14 jars	Decomposed	Sacramento	Destroyed
Manchurian walnuts	50 100-lb. sacks	Rancid	San Francisco	Chicken feed
Tomato catsup	674 cases—24 16-oz. bottles each	Decomposed	San Francisco	Destroyed
Tomato catsup	91 cases—24 8-oz. bottles each	Decomposed	San Francisco	Destroyed

BUREAU OF REGISTRATION OF NURSES.**REPORT FOR JUNE, 1921.**

ANNA C. JAMME, Director.

The regular June examination for certificates was held with an attendance of 253 applicants, which represented graduates of accredited schools in this state and a small number from without the state. It is interesting to note the increasingly large percentage of graduates who are taking the examination, and it is becoming more a matter of course to come up for the State Board as soon as possible after finishing the course, rather than to put it off. Once armed with the certificate and the R.N., a nurse feels more fully equipped and ready for what may present itself in the way of opportunity for post-graduate work or positions in the many and various branches of nursing work.

The change in the registration act pertaining to length of course and curriculum, are causing consideration; with some, that the student will not have a sufficient length of time in the hospital, and with many that the standard of instruction will be reduced. In the first instance, the bureau feels that the student should be as well qualified and prepared for fundamental nursing at the end of twenty-eight months as at the end of three years, if her bedside work has been properly supervised and the nonessentials, in domestic work, eliminated. As for the standard of instruction, this can not be measured altogether by number of hours, but rather by subjects and content. Educators, in general, are getting away from fixed and inflexible standards which have a tendency to narrow and limit the scope of instruction. It might seem that in arranging the curriculum the point of view should be the ultimate results obtained, rather than the following out of a circumscribed number of hours to be covered. The schools of nursing in the state have generally followed the plan of instruction of the National Standard Curriculum, which is used throughout the United States, and which serves as a guide for the instructors. The plan for the twenty-eight months' course will be in the hands of the schools by the first of September, when the fall classes begin.

Institute to Be Held.

An institute will be held in San Francisco on August 4, 5, and 6, for superintendents and instructors in schools of nursing. This is the first institute of this kind held in this state, and will be particularly valuable for those engaged in the teaching of students. It will bring under discussion methods of teaching the various subjects of the curriculum, which will be led by competent educators. Nurse instructors are increasing in numbers, about every school now finding it necessary to have such an instructor, and the coming together of this group to discuss the general problems of teaching and handling students will be of great help.

Hospital Conference.

The first meeting of the Hospital Conference in San Francisco, we hope, marks an epoch in the development of hospital work in this state. This meeting was held under the auspices of the League for the Conservation of Public Health at the Palace Hotel. The response was most

unanimous; 125 hospitals were represented by their medical or nurse superintendents, physicians, clinicians and, in some instances, by a member of the board of trustees. A large number of nurses were there. A group of sisters, representing the Catholic hospitals, were in attendance at every session during the two days.

The discussions covering the work of the various departments of the hospital were entered into and carried on with seriousness of purpose and apparently a great desire for better knowledge of methods. The dominating theme was "Hospital Betterment" and "Better Care of the Patient." This was emphasized over and over again by the various speakers. A keynote was struck on the first afternoon in the discussion pertaining to "Hospital Management," bringing to the front the idea that there must be harmony in the relation of the various departments and in the general management of the hospital. This note was followed throughout the discussions and brought out the idea of cooperation of the various departments in order to bring about a spirit of harmony in every part. It was most interesting to see how frequently the work of the graduate nurse and student nurse held a very definite place and was, in fact, often the pivotal point in the advancement of clinical work; in records, in treatments, ethics, and clinic work, the diagnosis and after-care of the patient showing that the nurse has her share. One felt more than ever impressed with the fact that the sublimity and high purpose of the hospitals can only be maintained by an intelligent cooperation of all the workers, and where this exists there is harmony and, in consequence, good work, which means better care of the sick, which, after all, is the fundamental purpose of the hospital.

BUREAU OF CHILD HYGIENE.

REPORT FOR JUNE, 1921.

ETHEL M. WATTERS, M.D., Director.

The month of June was spent in the five northeastern counties of the state, holding children's conferences which were scheduled months in advance. No visits had ever been made in Siskiyou County, nor in Tehama, but last year Trinity County and Shasta arranged a series of meetings. The response was most gratifying. In those places where conferences were held last year there was a larger attendance this year—for example, in Hayfork 46 children came last year and 73 this June. More parents and local officials visited the conferences, watched the examinations and made favorable comments. One 13-year-old boy's mother brought him reluctantly for examinations, and later in the afternoon he brought his five pals.

Miss Charlotte Greenhood, dental hygienist, who accompanied the members of the bureau through the courtesy of the Dental Educational Committee of the State Dental Association, aroused much interest in oral hygiene. Toothbrush drills were given the children and talks to mothers emphasizing the value of clean mouths were given in many places.

In Colusa County, Miss Kilgariff; in Tehama County, Miss Balch; in Shasta County, Miss Moore, and in Modoc County, Miss Thomas—all public health nurses—arranged our conferences. In Trinity, Miss Young, the county superintendent of schools, made the necessary preliminary arrangements and assisted. In Siskiyou County the members of the women's clubs helped us. In Sisson, Mrs. Schuler gave her beautiful home for the afternoon conference, where 56 children were examined. One notable feature of this last conference was the large number of Italian children who were brought by members of the committee. Interpreters were provided, for some of the mothers spoke no English.

Some communities were visited for the first time. In Trinity County meetings were held in Ruth and in Hyampom. To reach the latter place a 34-mile horseback trip was necessary, for Hyampom is an isolated valley which is not entered by a wagon road, and all supplies are transported via parcel post or mule back, even as the Bureau of Child Hygiene. The interest repaid us manifold, for there is no physician or dentist and the people had many questions to ask.

The remarkable regional difference noted in the physical condition of the children—in some places the teeth are neglected, and in adjoining towns, not more than 20 miles distant, the majority of the children have either excellent teeth or good dental care. Again, in some regions hypertrophy of the thyroid was found in many children, and in towns 15 miles away not one case was noted. Then, in some communities parents provided milk for their youngsters and saw that their diets contained green vegetables, and in a neighboring town the condition of the children showed dietetic deficiency. A number of Indian children were brought to the conferences, especially in Shasta County, and these children without exception showed poor diets. Their musculature was flabby, their bony development was rachitic and their dental enamel deficient.

All of the conferences were successful and offer a beginning for larger work next year. Plans are maturing in Trinity and in Siskiyou counties for public health nurses, and this means that follow-up work may be accomplished. One of the discouraging features of this bureau's work is the fact that the exact results are never known, for voluntary reports are not always complete, and sometimes it would be encouraging to know the number of parents who have acted on the advice which they received from us. Sometimes pessimism overtakes us in a broken car on the mountain grades and we have only to remember the number of children who have had their defects corrected, since our last visit, and who proudly returned to us for inspection, and we have only to remember the grateful thanks of some of the lonely women of these communities to regain at least a little enthusiasm to renew the struggle of attaining the mountain grades, or trudge, wearily, the long miles to the nearest place where a tow can be obtained.

At Williams, in Colusa County, where a conference was held, the Wednesday Club made all arrangements and included a playroom for the waiting children. At this conference 93 children were given physical examinations and 45 others came from school for toothbrush drill. Last year there were only 16 who came. This year Dr. Salter brought some most interesting little people who were suffering from rare chronic ailments. The volunteer committee from the Women's Club made possible this splendid result and kept a wonderful spirit of harmony pervading the Legion Hall, where the conference was held.

The infant mortality rate for California for 1920 has just been reported as 75. This compares favorably with other states, but is still much higher than it should be, and faulty birth registration must be blamed in some communities. There is a great problem here involving prenatal and infant care, too, which will owe its solution to indefatigable energy of local women who recognize conditions and demand remedies.

There has been some mention of lack of cooperation between local professional men and official health agents in some of the states, but fortunately the physicians and dentists are cordially welcoming this bureau, giving aid and encouragement everywhere.

List of Diseases Reportable by Law

ANTHRAX
BERI-BERI
CEREBROSPINAL MENINGITIS
 (Epidemic)
CHICKENPOX
CHOLERA, ASIATIC
DENGUE
DIPHThERIA
DYSENTERY
ENCEPHALITIS (Epidemic)
ERYSIPELAS
GERMAN MEASLES
GLANDERS
*** GONOCOCCUS INFECTION**
HOOKWORM
INFLUENZA
LEPROSY
MALARIA
MEASLES
MUMPS

OPHTHALMIA NEONATORUM
PARATYPHOID FEVER
PELLAGRA
PLAGUE
PNEUMONIA (Lobar)
POLIOMYELITIS
RABIES
ROCKY MOUNTAIN SPOTTED
 (or Tick) **FEVER**
SCARLET FEVER
SMALLPOX
*** SYPHILIS**
TETANUS
TRACHOMA
TUBERCULOSIS
TYPHOID FEVER
TYPHUS FEVER
WHOOPIING COUGH
YELLOW FEVER

* Reported by office number. Name and address not required.

Quarantinable Diseases

CEREBROSPINAL MENINGITIS
 (Epidemic)
CHOLERA, ASIATIC
DIPHThERIA
LEPROSY
PLAGUE

POLIOMYELITIS
SCARLET FEVER
SMALLPOX
TYPHOID FEVER
TYPHUS FEVER
YELLOW FEVER

Section 16, Public Health Act. All physicians, nurses, clergymen, attendants, owners, proprietors, managers, employees, and persons living in or visiting any sick person in any hotel, lodging house, house, building, office, structure, or other place where any person shall be ill of any infectious, contagious, or communicable disease, shall promptly report such fact to the county, city and county, city, or other local health board or health officer, together with the name of the person, if known, and place where such person is confined, and nature of the disease, if known.

